RESEARCH NOTE

Natural Infection of *Phyllocaulis soleiformis* with Larvae Morphologically Similar to L2 of *Angiostrongylus costaricensis*

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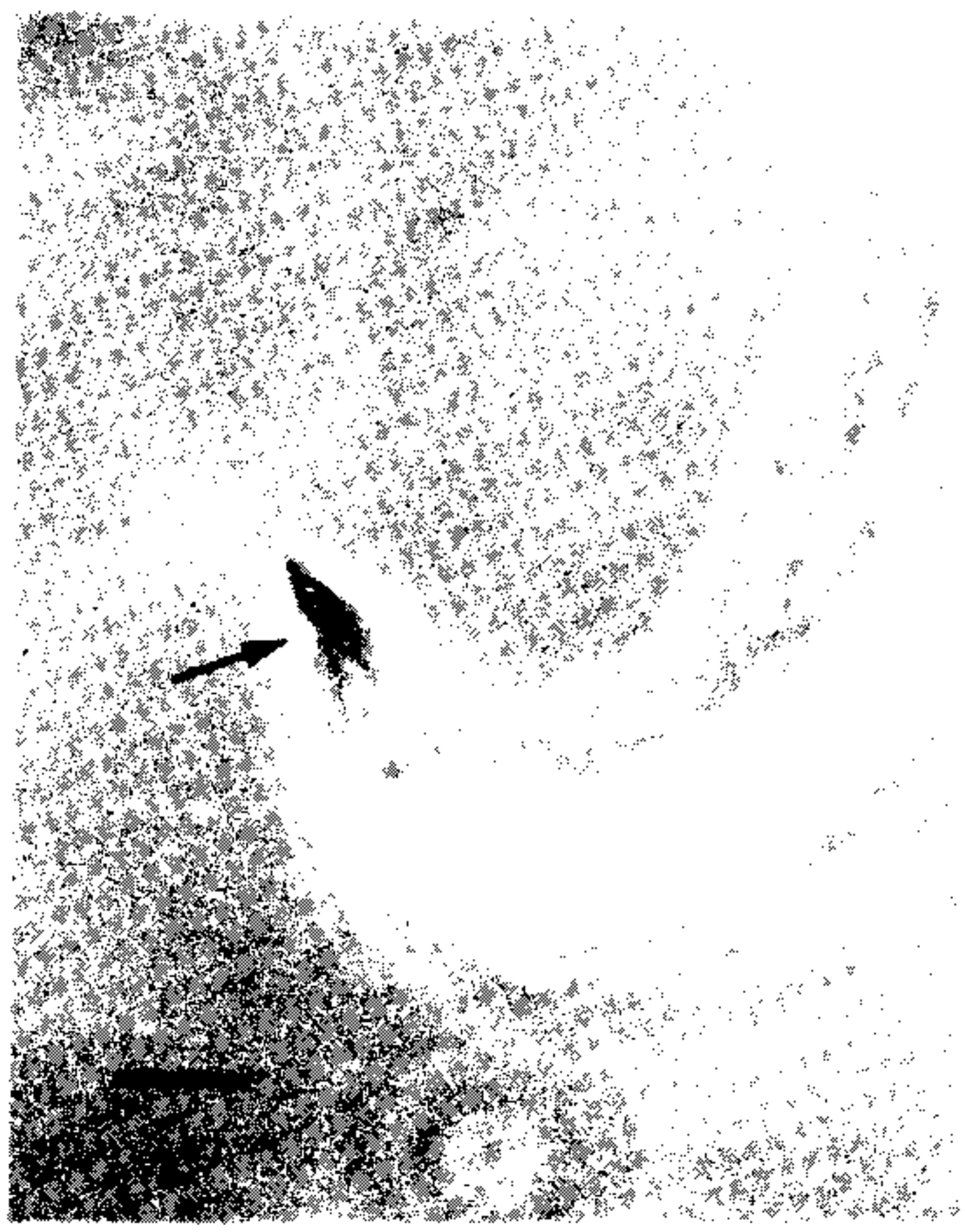
Veronicellid slugs have been reported as the most important intermediate hosts for *Angiostrongylus costaricensis,* an intra-arterial nematode of rodents (P Moreira 1973 *Am J Trop Med Hyg 22:* 613-621). In southern Brazil, *Phyllocaulis variegatus* was found infected (C Graeff-Teixeira et al 1989 *Mem Inst Oswaldo Cruz 84:* 65-67). The geographic distribution of this mollusc is coincident with the endemic area for abdominal angiostrongyliasis. Otherwise, *Phyllocaulis soleiformis* is usually collected from the central high plains in Rio Grande do Sul, a non-endemic area for *A. costaricensis* infection (C Graeff-Teixeira et al 1990 *Rev Inst Med trop São Paulo 35:* 373-378).

A recent diagnosis in a patient living in that region led to a search for the source of infection. Molluscs were collected in February 1992 and the parasitological examination of 34 *P. soleiformis* resulted in the detection of a partially destroyed larva with a delicate groove in the tail (Fig.). This is a feature described for *A. costaricensis* larvae (Morera *loc. cit.*). Another trial was performed in September 1992 and revealed two out of 28 *P. soleiformis* infected with similar larvae. Inoculation in mice and the study of adult worms for the definitive identification was not possible because most of the larvae were dead and partially destroyed. Collection and parasitological examination of slugs from that area will continue in order to confirm this finding.

This is an indication that *P. soleiformis* is an intermediate host for *A. costaricensis* and that the parasite occurs in an area considered to be of low-risk for the human infection. The study of several endemic foci of abdominal angiostrongyliasis demonstrated a lack of specificity for intermediate hosts, since several terrestrial molluscs have been found infected (C Graeff-Teixeira et al 1993 *Mem Inst Oswaldo Cruz 88:* 487-489). However, differences in susceptibility and behavior of species may play an important role in the intensity of transmission in different foci.



Tail of a larvae found in *Phyllocaulis soleiformis*, showing a delicate transversal groove (arrow) (bar = 10 µm).

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